

REMARKS

Claims 1-6, 8-16, 18-27 and 29-31 are now pending in the application. Claims 2-6, 8-10, 21-27 and 29-31 are cancelled herein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 11-16 and 18-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sharma et al. (U.S. Pat. No. 6,364,459). This rejection is respectfully traversed.

Independent claim 1 calls for a droplet ejecting device comprising: an ejector that is adapted to eject a liquid stored in a pressure chamber from an ejecting nozzle by applying pressure to the pressure chamber; an ejection timing detector that is adapted to detect a liquid column being ejected from the ejecting nozzle; a droplet separator that is adapted to give, to the liquid column, an energy that separates the liquid column from the liquid stored in the pressure chamber; and a controller that is adapted to control the droplet separator to give an energy at a timing when a predetermined time period has elapsed since the ejection of the liquid column detected by the ejection timing detector.

Independent claim 11 calls for a droplet ejecting method, comprising: ejecting a liquid stored in a pressure chamber from an ejecting nozzle by applying pressure to the pressure chamber; detecting a liquid column being ejected from the ejecting nozzle; and giving, to the liquid column, an energy that separates the liquid column from the liquid

stored in the pressure chamber, the energy being given at a timing when a predetermined time period has elapsed since the ejection of the liquid column.

Thus, claim 1 calls for an ejection timing detector that is adapted to detect a liquid column being ejected from the ejecting nozzle. Similarly, claim 11 calls for detecting a liquid column being ejected from the ejecting nozzle. The Office Action states that Figure 2 of Sharma discloses a row of liquid column 60 being detected by the light beam 70 from the light source 75. Applicant respectfully disagrees.

In Sharma, the light beam 70 is merely used for causing droplet meniscus 60 to extend but is not used for detecting a liquid column being ejected. In Figure 2, the light beam 70 emitted from light source 70 causes menisci 60 to extend. Menisci 80 is the menisci after the extension. This is clearly described in column 3, lines 35-40, and column 3, line 66 - column 4, line 2.

To detect something by light, in other words, to use a light sensor, requires some kind of a light receiver device. However, Sharma does not disclose such a light receiver device. This supports the view that Sharma's light is merely used for causing droplet meniscus to extend but is not used for detecting a liquid column being ejected. In conclusion, Sharma discloses no detector to detect a start timing at which a liquid column starts being ejected.

Thus, Sharma cannot anticipate claims 1 and 11. Likewise, Sharma cannot anticipate claims 12-16 and 18-20 depending therefrom.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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